

Work Order ID 149766 -1

149766

Page 1

Thursday, August 04, 2016 7:08:50 AM

Item ID: D135-692-011

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: EC135 Bearpaws

Start Date: 8/19/2016 Start Qty: 6.00

6

Cust Item ID:

Required Date: 9/6/2016 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan:

DAS
21
9-89

Date:

AUG 04 2016

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3049	B
DSI 9750	A
IIN-D135-692	B

DAS
21
9-89

AUG 04 2016

100

Document Control

0.00

100

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile and create labels per PPP D135-692-011 CHG003

DAS
27
9-89

MIS 16-08-04 (6)

AUG 31 2016

150

Pick Kit

0.00

150

Packaging

Memo

0.00

Packaging

(3) (6) PK

DAS
28
9-89

AUG 19 2016

Work Order ID 149766***149766***

Page 2

Thursday, August 04, 2016 7:08:50 AM

Item ID: D135-692-011

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: EC135 Bearpaws

Start Date: 8/19/2016 Start Qty: 6.00

6

Cust Item ID:

Required Date: 9/6/2016 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

160

QC4- 100% Inspect kits for completeness

0.00

160

QC

Memo

0.03

Quality Control

DAS
27
9-89

AUG 31 2016

170

Packaging

0.00

170

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D135-692-011

Location: _____

PPP Rev: _____

X1 sold
Y2 fgoBDAS
28
9-893
DAS
27
9-89

AUG 31 2016

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.10

Quality Control

DAS
21
9-89

AUG 31 2016

Em 16/08/31

Picklist Print

Thursday, August 04, 2016 7:08:56 AM

Page 1

Work Order ID: 149766

149766

Parent Item: D135-692-011

D135-692-011

Parent Item Name: EC135 Bearpaws

Start Date: 8/19/2016

Required Date: 9/6/2016

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:C04.02.17Blank size changed, Tolerance added Step
3KJ/JLM IPP REV:E AS PER DSI
9592/9587 REV A JLM VERIFIED BY:EC
IPP Rev:D 08-04-16 Added Step 2 JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2182B

Manufactured No

160

f

401.0128

2

D2182B

Rubber Cushion - Black (\$Per Foot)

**

B/416738
12
PC
DAS 28 9-89

Location

Loc Qty

Loc Code

ST411

401.0128

108914

2.5

130427

48.5128

135093

350

DAS 27 9-89

(D2182B060) Cut 4 at 6.00"

D2274

Manufactured No

160

Each

506.0000

8

D2274

Radius Block

**

24
PC
DAS 28 9-89

Location

Loc Qty

Loc Code

FG

12

86855

12

ST006

191

110264

12

144391

19

146624

160

ST012a

303

147530

303

DAS 27 9-89

D3049-1

Manufactured No

160

Each

0.0000

2

D3049-1

Bearpaw

**

48
126
149753
8/29/16
PC
DAS 28 9-89

AUG 19 2016

DAS 27 9-89

Picklist Print

Thursday, August 04, 2016 7:08:56 AM

Page 2

Work Order ID: 149766

149766

Parent Item: D135-692-011

D135-692-011

Parent Item Name: EC135 Bearpaws

Start Date: 8/19/2016

Required Date: 9/6/2016

Start Qty: 6.00

Required Qty: 6.00

D2529

Manufactured No

160

Each

696.0000

8

48 21

PC DAS 28 9-89

D2529

Washer

**

DAS 27 9-89

Location

Loc Qty

Loc Code

ST008

696

108881

12

145269

184

147569

500

48 24 12

D2519

Manufactured No

160

Each

32.0000

4

24 12

PC DAS 28 9-89

D2519

Clamp

**

DAS 27 9-89

Location

Loc Qty

Loc Code

ST542

32

145439

32

48 24 24

AN4-13A

Purchased No

Each

139.0000

**

PC X M135390 DAS 28 9-89

AN4-13A

Bolt

DAS 27 9-89

Location

Loc Qty

Loc Code

FG

20

122808

20

GA

29

m134634

19

m134943

10

over003

50

m134943

50

ST343

40

m134852

40

AUG 19 2016

Thursday, August 04, 2016 7:08:56 AM

Shop Packet Print

Page 2

Picklist Print

Thursday, August 04, 2016 7:08:56 AM

Page 3

Work Order ID: 149766

149766

Parent Item: D135-692-011

D135-692-011

Parent Item Name: EC135 Bearpaws

Start Date: 8/19/2016

Required Date: 9/6/2016

Start Qty: 6.00

Required Qty: 6.00

MS21042L4

Purchased

No

160

Each

2,335.000

8

48 ²⁴

PC

DAS
28
9-89

MS21042L4

Locknut

**

Location

Loc Qty

Loc Code

FP001

51

m133363

51

GA

428

m133769

116

m135058

312

ST3003

26

m134955

26

ST303

1830

m135127

830

m135297

1000

V19
X5

35
13
48

PC

DAS
28
9-89

NAS1149D0463J

Purchased

No

160

Each

1,404.000

8

**

NAS1149D0463J

Washer

Location

Loc Qty

Loc Code

GA

240

M132035

15

M134508

32

M135056

193

ST260a

600

M135056

600

ST263

564

M134943

564

48

AUG 19 2016

DAS
28
9-89

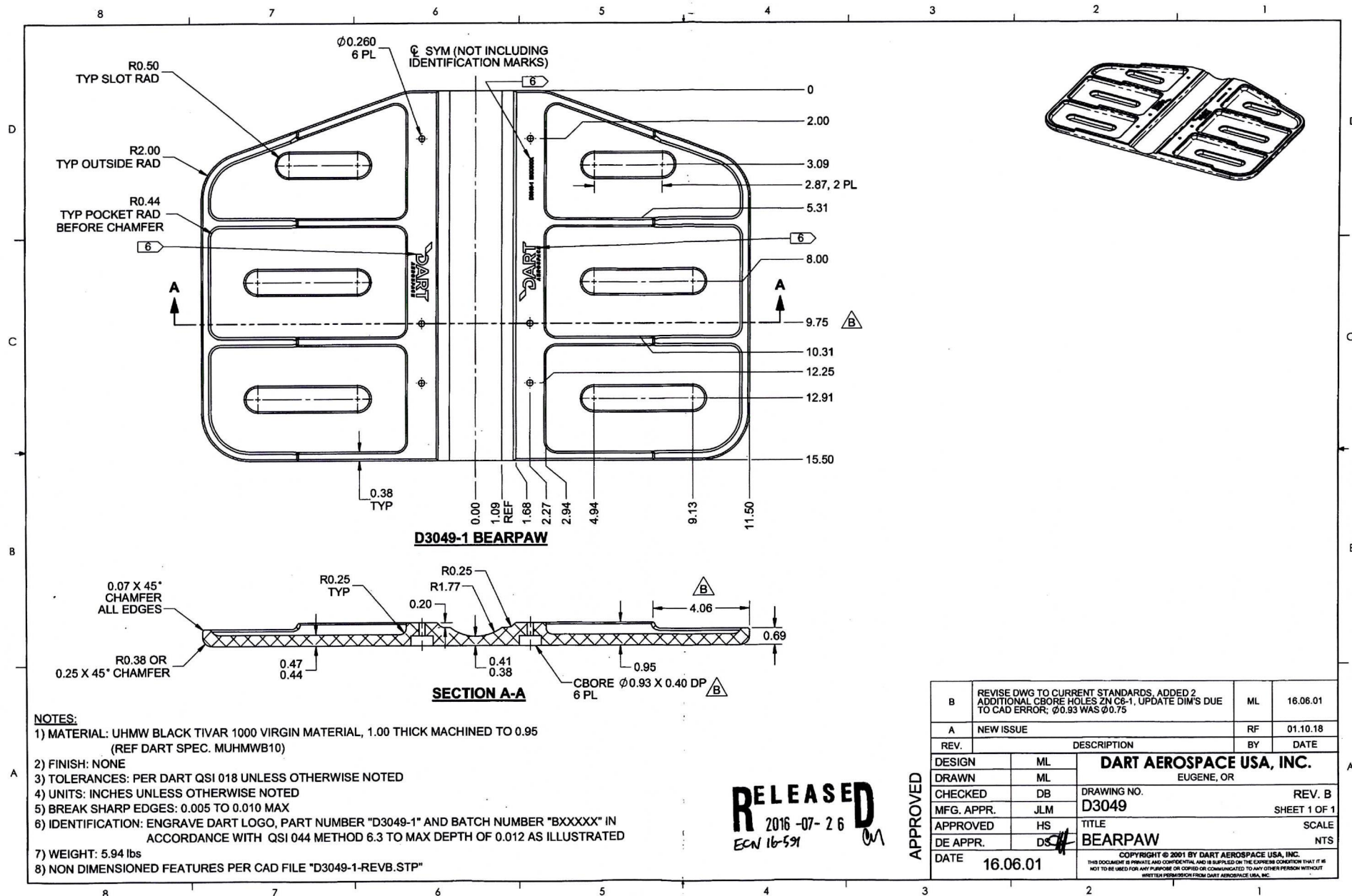
QS100 M24S

Batch: 134606 X 5 X 5
134861 X 7 X 7

Thursday, August 04, 2016 7:08:56 AM

Shop Packet Print

Page 3



B	REVISE DWG TO CURRENT STANDARDS, ADDED 2 ADDITIONAL CBORE HOLES ZN C6-1, UPDATE DIM'S DUE TO CAD ERROR; Ø0.93 WAS Ø0.75	ML	16.06.01
A	NEW ISSUE	RF	01.10.18
REV.	DESCRIPTION	BY	DATE
DESIGN	ML	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	ML		
CHECKED	DB	DRAWING NO. D3049	
MFG. APPR.	JLM	REV. B SHEET 1 OF 1	
APPROVED	HS	TITLE BEARPAW	
DE APPR.	DS	SCALE NTS	
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w/o 149766

sem 16/07/29

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D135-692 REV. B AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D135-692 REV. 1
REF. FAA STC: SR01042SE
REF. TCCA LETTER OF ACCEPTANCE: 120S-GA-08-52
REF. EASA STC: 10038103

1.0 PURPOSE

The purpose of this Dart Service Instruction is to allow customers with D135-692-011 Bearpaws at CHG 002 and earlier to modify the D3049-1 Bearpaw to relocate the aft most D2519 Clamp and D2182B060 Rubber Cushion by up to 2.5" (63.5 mm) further forward to avoid interference with the snow ski provisions on the OEM skidtubes. At CHG 003 and later, the D3049-1 Bearpaw is supplied with the provisions to relocate the clamp and cushion.

2.0 INSTALLATION PROCEDURE

2.1 Jack up the aircraft. Ensure the skidtubes are serviceable.

NOTE: For D135-692-011 Bearpaw Kits at CHG 002 and prior, drill Qty 2x Ø0.26" (6.60 mm) holes through the D3049-1 Bearpaws as indicated in Figure 1 of this Dart Service Instruction. Counter bore the holes on the underside of the bearpaws Ø0.94" to Ø1.00" (23.87 mm to 25.40 mm) and to a depth of 0.40" (10.16 mm).

2.2 If installing the D135-692-011 Bearpaw Kit **with** the D135-692-041 Wearplate Kit, align the D3719-041 Wearplate under the D3049-1 Bearpaw as shown in Figure 1 of this service instruction and install the bearpaw and wearplate onto the skidtube using the hardware shown in Figure 2, 3 and 4 of this service instruction.

2.3 If installing the D135-692-011 Bearpaw Kit **without** the D135-692-041 Wearplate Kit, align the D3049-1 Bearpaw as shown in Figure 1 of this service instruction and install the bearpaw onto the skidtube using the hardware shown in Figure 5 of this service instruction.

NOTE: The bearpaws should be installed over the skidtube wearshoes. The D3049-1 Bearpaw may be relieved to clear skidtube wearshoe mounting screws provided the relief leaves 0.375" (9.53 mm) thickness.

CAUTION: The torque on the nuts should be limited to 20 in-lb (2.3 Nm).

2.6 Lower the aircraft.

2.7 Update the aircraft log book as applicable to indicate installation of the DSI 9750-011 Install Modification, D135-692-011 Bearpaws and D135-692-041 Wearplate Kit.

A	NEW ISSUE	ML	16.06.01
REV.	DESCRIPTION	BY	DATE
DESIGN	ML	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	ML		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9750	SHEET 1 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	INSTALL MODIFICATION	NTS
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3.0 PARTS LIST

The DSI 9750-011 Clamp Relocation Kit can be procured from Dart to install D135-692-041 on D135-692-011 at CHG 002 and earlier, and includes hardware for Qty 2x skid tubes.

Qty -011	Part Number	Description
X	DSI 9750-011	Clamp Relocation Kit
8	D2529	WASHER
4	AN4-11A	BOLT
4	MS21042L4	NUT

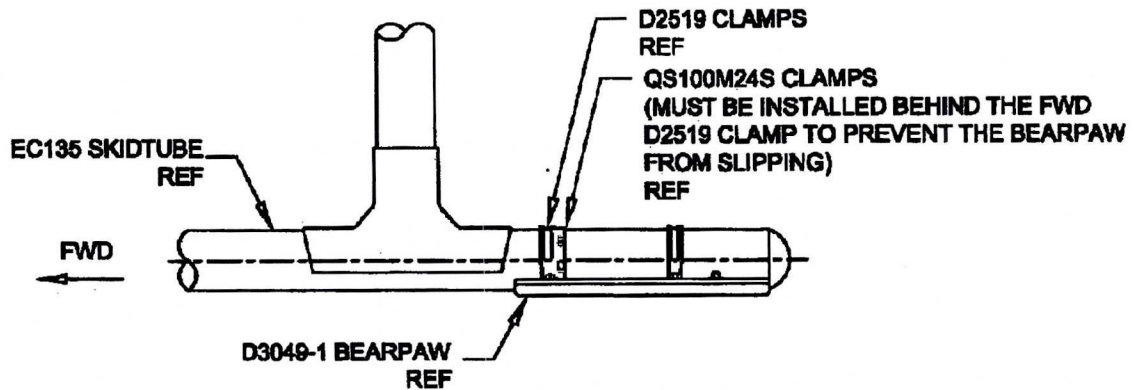
The parts list for IIN-D135-692 and ICA-D135-692 is amended as follows:

Qty -011	Qty -041	Part Number	Description
X		D135-692-011	BEARPAW INSTALLATION
	X	D135-692-041	WEARPLATE KIT
4		D2182B060	RUBBER CUSHION
8		D2274	RADIUS BLOCK
2		D3049-1	BEARPAW
8	8	D2529	WASHER
4		D2519	CLAMP
	2	D3719-041	WEARPLATE
	4	AN4-11A	BOLT
8	8	AN4-13A	BOLT
8	12	MS21042L4	NUT (OR MS21042-4)
8	8	NAS1149D0463J	WASHER
4		QS100M24S	CLAMP

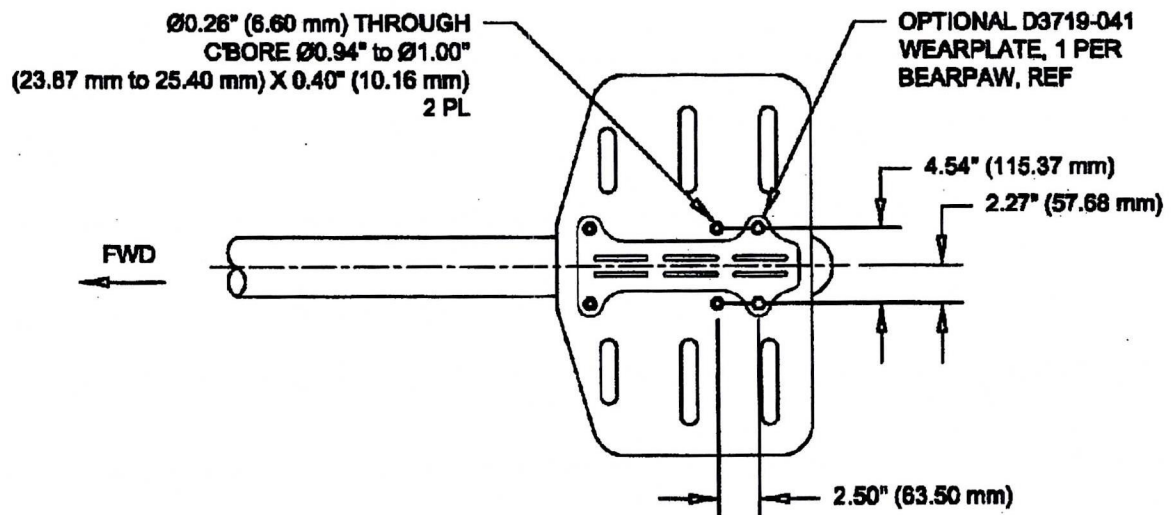
4.0 WEIGHT AND BALANCE

There is a negligible weight and balance change associated with this modification.

DESIGN	ML	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	ML		
CHECKED	<i>JP</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9750	SHEET 2 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	INSTALL MODIFICATION	NTS
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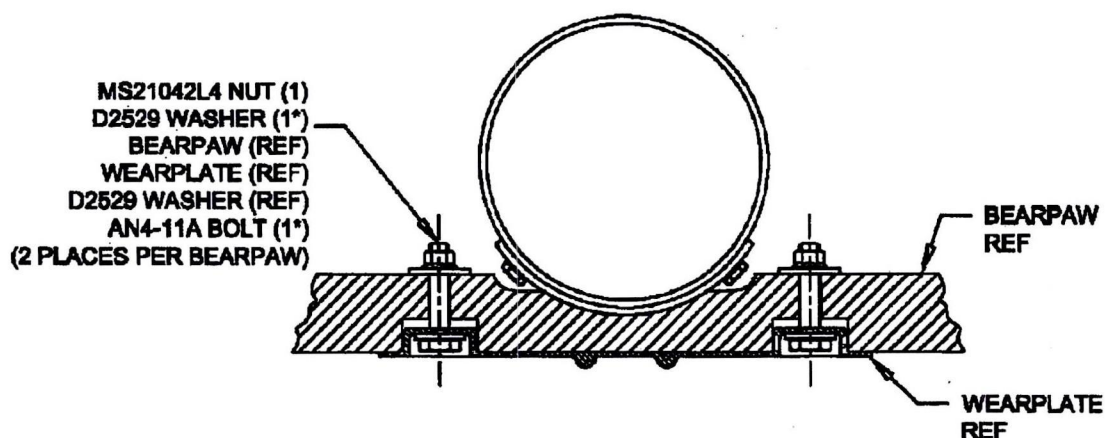
SIDE VIEW



BOTTOM VIEW

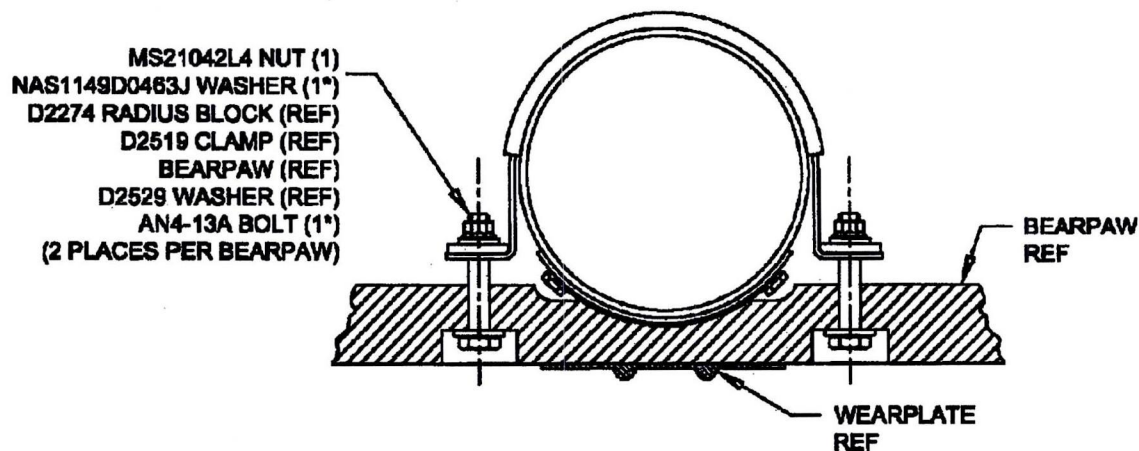
FIGURE 1: MODIFICATION OF D135-692-011 INSTALLATION
NOT TO SCALE

DESIGN	ML	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	ML		
CHECKED	<i>UP</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9750	SHEET 3 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	INSTALL MODIFICATION	NTS
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* ADDITIONAL NAS1149D0463J WASHERS MAY BE INSTALLED UNDER THE NUTS TO ENSURE 1.5-4 THREADS IN SAFETY ON THE BOLTS. IT IS ALSO ACCEPTABLE TO REPLACE THE AN4-11A BOLTS WITH LONGER OR SHORTER AN4 BOLTS, IF REQUIRED.

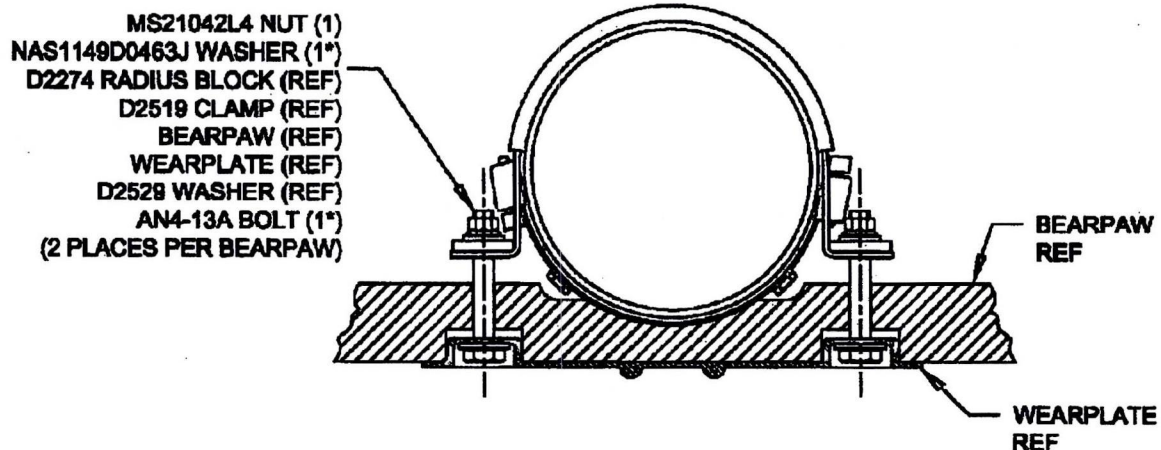
FIGURE 2: HARDWARE INSTALLATION AT AFT HOLE LOCATION
(WITH WEARPLATE, NOT TO SCALE)



* ADDITIONAL NAS1149D0463J WASHERS MAY BE INSTALLED UNDER THE NUTS TO ENSURE 1.5-4 THREADS IN SAFETY ON THE BOLTS. IT IS ALSO ACCEPTABLE TO REPLACE THE AN4-13A BOLTS WITH LONGER OR SHORTER AN4 BOLTS, IF REQUIRED.

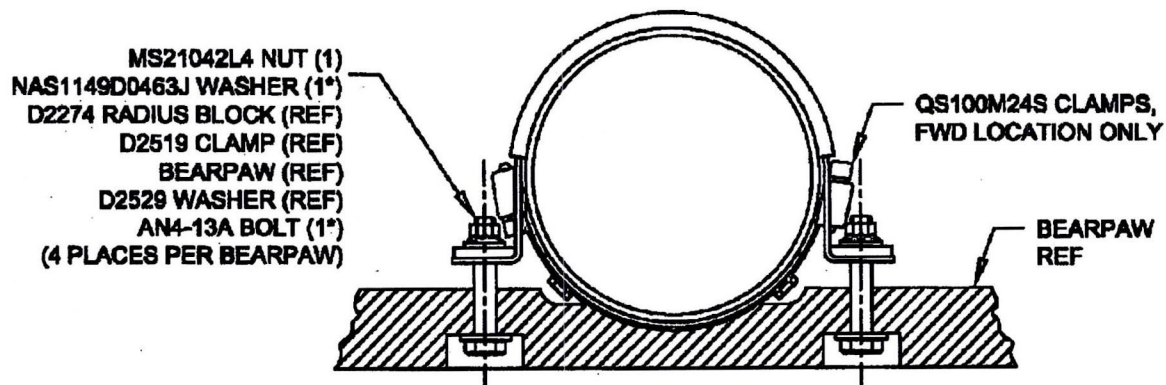
FIGURE 3: HARDWARE INSTALLATION AT MID HOLE LOCATION
(WITH WEARPLATE, NOT TO SCALE)

DESIGN	ML	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	ML		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9750	SHEET 4 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	INSTALL MODIFICATION	NTS
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* ADDITIONAL NAS1149D0463J WASHERS MAY BE INSTALLED UNDER THE NUTS TO ENSURE 1.5-4 THREADS IN SAFETY ON THE BOLTS. IT IS ALSO ACCEPTABLE TO REPLACE THE AN4-13A BOLTS WITH LONGER OR SHORTER AN4 BOLTS, IF REQUIRED.

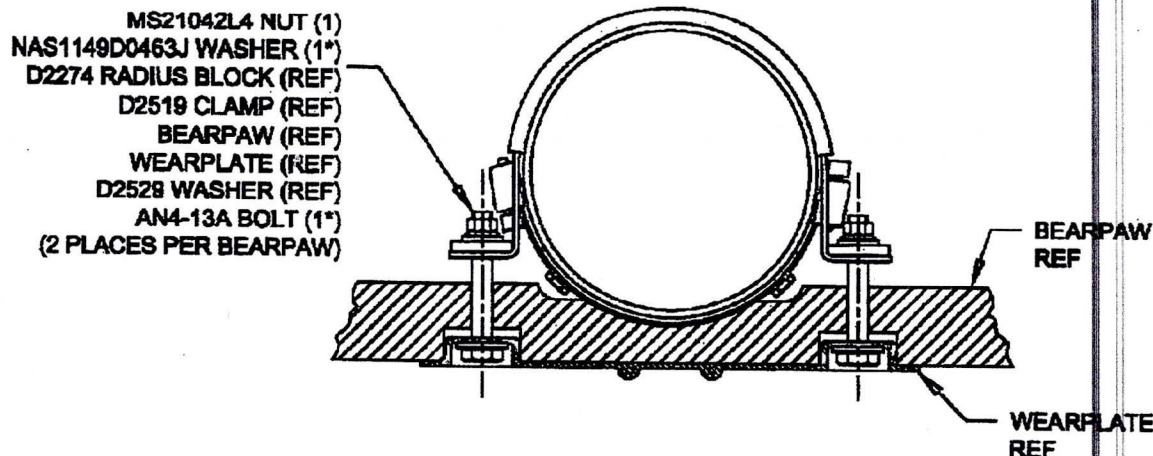
**FIGURE 4: HARDWARE INSTALLATION AT FWD HOLE LOCATION
 (WITH WEARPLATE, NOT TO SCALE)**



* ADDITIONAL NAS1149D0463J WASHERS MAY BE INSTALLED UNDER THE NUTS TO ENSURE 1.5-4 THREADS IN SAFETY ON THE BOLTS. IT IS ALSO ACCEPTABLE TO REPLACE THE AN4-13A BOLTS WITH LONGER OR SHORTER AN4 BOLTS, IF REQUIRED.

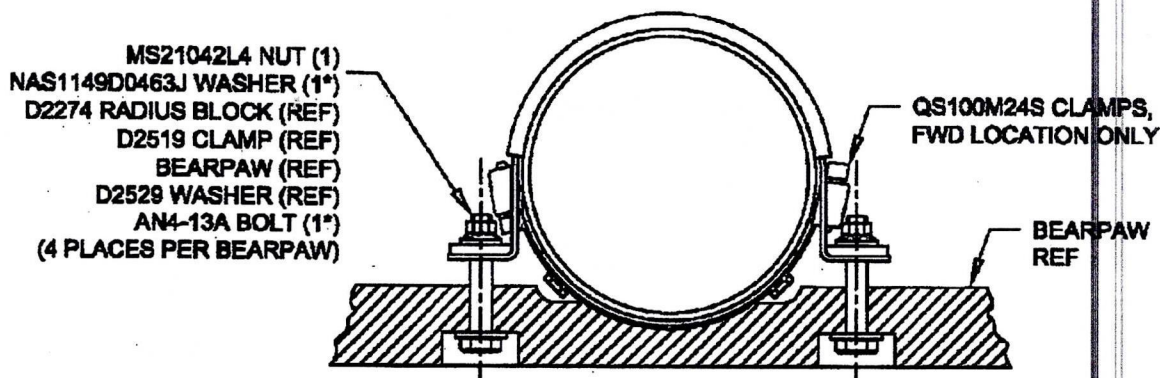
**FIGURE 5: HARDWARE INSTALLATION
 (WITHOUT WEARPLATE, NOT TO SCALE)**

DESIGN	ML	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	ML		
CHECKED	<i>[Signature]</i>	DRAWING NO. DSI 9750	REV. A
MFG. APPR.	N/A	SHEET 5 OF 5	
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	INSTALL MODIFICATION	NTS
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* ADDITIONAL NAS1149D0463J WASHERS MAY BE INSTALLED UNDER THE NUTS TO ENSURE 1.5-4 THREADS IN SAFETY ON THE BOLTS. IT IS ALSO ACCEPTABLE TO REPLACE THE AN4-13A BOLTS WITH LONGER OR SHORTER AN4 BOLTS, IF REQUIRED.

**FIGURE 4: HARDWARE INSTALLATION AT FWD HOLE LOCATION
 (WITH WEARPLATE, NOT TO SCALE)**



* ADDITIONAL NAS1149D0463J WASHERS MAY BE INSTALLED UNDER THE NUTS TO ENSURE 1.5-4 THREADS IN SAFETY ON THE BOLTS. IT IS ALSO ACCEPTABLE TO REPLACE THE AN4-13A BOLTS WITH LONGER OR SHORTER AN4 BOLTS, IF REQUIRED.

**FIGURE 5: HARDWARE INSTALLATION
 (WITHOUT WEARPLATE, NOT TO SCALE)**

DESIGN	ML	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	ML		
CHECKED	<i>q</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9750	SHEET 5 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	INSTALL MODIFICATION	NTS
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4. WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D135-692-011 <i>Bearpaw Installation</i>	11.8 lb 5.36 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	199.7 in 5.07 m	2356 in-lb 27.2 m-kg
D135-692-041 <i>Wearplate Kit</i>	2.24 lb 1.0 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	199.7 in 5.07 m	447 in-lb 5.1 m-kg
D135-692-011 <i>Bearpaw Installation, Aft Location</i>	11.8 lb 5.36 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	201 in 5.10 m	2372 in-lb 27.3 m-kg
D135-692-041 <i>Wearplate Kit, Aft Location</i>	2.24 lb 1.0 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	201 in 5.10 m	450 in-lb 5.1 m-kg

5. PARTS LIST

Qty -011	Qty -041	Part Number	Description
X		D135-692-011	BEARPAW INSTALLATION
	X	D135-692-041	WEARPLATE KIT
4		D2182B060	RUBBER CUSHION
8		D2274	RADIUS BLOCK
2		D3049-1	BEARPAW
8		D2529	WASHER
4		D2519	CLAMP
	2	D3719-041	WEARPLATE
8	8	AN4-13A	BOLT
8	8	NAS1149D0463J	WASHERS
8	8	MS21042L4	NUT (OR MS21042-4)
4		QS100M24S	CLAMP

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Revision: **B**

Date: 15.07.20